



UNIVERSITY OF
GOTHENBURG

What happens to the NIMBY syndrome when we bring money to the table?

*A qualitative perspective on attitudes towards local nuclear
waste repository*

Bachelor Thesis in Political Science

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ABSTRACT

Nuclear waste repository constitutes a great predicament in many countries. In Sweden, the Not-In-My-Backyard (NIMBY) syndrome has been rampant, as local opposition has blocked the attempts at storing nuclear waste at numerous occasions. If the dilemma is to be settled, the voice of the public must be heard. From a qualitative perspective, this thesis examines public reactions towards local nuclear waste repositories. When allocating unwanted facilities, the distribution of costs and benefits is regularly perceived as unfair by the local residents. This thesis, therefore, explores the effect of offering individuals a monetary compensation in exchange for living near a perceived nuisance. With the methodological approach of long interviews, several lines of reasoning are characterized. It was found that individuals opposing the local facility siting argued on the basis of a critique towards the scientific community, by voicing a great anxiety of potential health hazards. This line of reasoning was split in two, when compensation was offered. Some were inclined to accept the facility in exchange for a compensation, while others were not. A different line of reasoning is displayed by those with a positive attitude towards the thought of their community hosting the facility, with or without compensation. Emphasizing a trust in the scientific community, these individuals felt at ease with the prospect of a local nuclear waste disposal.

Keywords: line of reasoning, long interviews, monetary compensation, NIMBY, nuclear waste repository

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“O Duty!

Why hast thou not the visage of a sweetie or a cutie?”

- Ogden Nash

1. INTRODUCTION

What do prisons, airports and facilities for final disposal of nuclear waste have in common? They all trigger a form of human behavior known as the NIMBY syndrome (Not-In-My-Backyard). It is identified as a social rejection towards the siting of infrastructure and facilities which are, albeit societal necessities, locally unwanted. As governments seek to allocate societal infrastructure, local resistance constitutes a great predicament. Tantrums based on energetic citizen participation frequently cause national planning issues as people partially let their parochial attitudes stand in the way of a societal need (Eagle, 2005; Wolsink, 2000; Lake, 1993). However, the NIMBY syndrome may be understandable, considering the costs of construction projects are usually geographically concentrated while the benefits may be shared by a much larger population. Such costs may include, among other things, a decrease in property values and a negative impact on the local environment. Citizen protests should therefore not purely be regarded as selfish and irrational behavior (Kraft & Clary, 1991; Mannarini & Roccato, 2011).

In instances where the allocation of infrastructure is perceived by some to be unwanted, it has been suggested that the local public should be fairly compensated for the nuisance. Monetary compensation has been proposed, but the research shows that economic incentives do not always sway individuals into behaving in a certain manner (World Bank, 2014). The empirical evidence is conflicting, and it appears as if the effect varies. On some occasions the local public may be persuaded into accepting the siting of unwanted infrastructure, when offered a monetary compensation. At other times, the incentive fails to fulfill its purpose (Gallagher, Ferreira & Convery, 2008).

By including a qualitative perspective, this thesis adds a substantial aspect to the research field. Instead of merely testing whether individuals are positive or negative towards being offered a monetary compensation, this thesis attempts to answer *why*, and as to how individuals arrived at their preferences. Studying lines of reasoning, this thesis aims at exploring unanticipated motives used by individuals arguing on unwanted construction projects. The purpose is to study whether the same individuals would argue differently when offered an economic compensation. Unlike

most research on the NIMBY syndrome, this thesis includes a wider perspective by studying both those who oppose, as well as those who favor a certain local facility siting. The comparison makes it possible to depict how the rationale of those displaying the NIMBY syndrome differs from others when offered a monetary incentive.

Local protests have posed as great difficulties in the establishment of several controversial facilities. One distinctive example of an infrastructure project halted by the NIMBY syndrome is the siting of nuclear waste storage in Sweden. For decades, it has been a societal need to find safe locations in Sweden to place facilities for final disposal of radioactive waste. Several communities around the nation has over time been suggested as possible locations for the facilities, but due to local organized protests most geological examinations have been cancelled. There are now only two communities left in consideration (Swedish Radiation Safety Authority, 2017).

The ongoing project of nuclear waste storage in Sweden works well as the basis for this thesis to explore individual's reaction on monetary compensation. As the project has been blocked for decades, there is a need for change. It has been demonstrated that a great many individuals disapprove of the local siting of nuclear waste disposal, but a thorough study of relevant realm of thoughts, i.e., the rationale behind the protests, has not been demonstrated.

In an empirical study, Frey, Oberholzer-Gee & Eichenberger (1996) measured individuals' reactions on being offered monetary compensation for the siting of a local nuclear waste repository. They found that the incentive decreased the acceptance for the facility siting. This thesis resembles the study by Frey et al., but has a different focus and methodological approach. It studies individuals' perception of others and the scientific community. Simply declaring that there is a resistance towards certain construction projects does not solve the issue of facility siting. If the crucial challenge is to be handled, and the protestors are to be pleased, their lines of reasoning must be heard. This thesis attempts at adding a valuable contribution to the pursuit of finding suitable locations for the establishment of nuclear waste repositories, while also providing scientific supplement on the human reaction to monetary compensation.

Beginning with a literature review, this thesis presents research on the NIMBY syndrome, the project of storing nuclear waste in Sweden, as well as human reaction to monetary incentives. Further, the purpose, research questions and methodological approach are introduced, followed by the results. In an analysis of the collected material, a discussion is thereafter held on what scientific contributions this thesis may display. Finally, a conclusion summarizes the thesis.

2. LITERATURE REVIEW

Introducing the relevant research on the Not-In-My-Backyard syndrome, this literature review begins its thematic structure. The ongoing project of finding locations to store nuclear waste in Sweden is then presented, followed by the research on human reactions to monetary compensation. Lastly, the research gap is identified, which illustrates the attempted contribution of this thesis.

The NIMBY syndrome in its quintessential form is characterized by the local protests towards the siting of a certain project which is a widely recognized necessity. Frustrated by perceived potential costs the facility siting might have on the local community, public opposition has prevented the establishment of many facilities around the globe (Munton, 1996; Inhaber, 1997: 6). When the public oppose the siting of a societal necessity it makes for a democratic quandary. A recurring pattern amidst the objecting individuals is a distrust in project sponsors and scientific experts. It has been suggested that the assurance of experts will have no appeasing impact on skeptical individuals (Michaud, Carlisle & Smith, 2008; Kraft & Clary, 1991; Smith & Marquez, 2000). In various measures, the NIMBY syndrome has been studied extensively. Among other examples, the focal point has been on types of facility, the distance between individual and facility and the implementation process (Esaiasson, 2014; Wolsink & Devilee, 2009).

The NIMBY syndrome frequently appears amidst other acronyms in literature. For instance, when referring to the object of aversion, the LULU effect (Local-Unwanted-Land-Use) is the most suitable acronym. Other examples include the acronym used to describe a relatively new opposition trend against technological progress known as the BANANA effect (Build-Absolutely-Nothing-Anywhere-Near-Anyone). The NIABY syndrome (Not-In-Any-Backyard), too could be another example to the subject matter. It is of significance, inasmuch as it distinguishes those who oppose a facility in their own community from those who object the infrastructure project regardless of location (Wolf, 1987; Tipaldo, 2011; Pol, Di Masso, Castrechini, Bonet & Vidal, 2006).

In the pursuit of finding locations to place facilities for final disposal of nuclear waste, the NIMBY syndrome surfaces recurrently. The disposal of high-level nuclear waste has even been defined as “the ultimate siting controversy” (Kraft, 1996: 108). Sweden constitutionally guarantees local spheres a voice in the decision-making process, which favors local protests in cases relating to nuclear waste repositories (Söderholm, Pettersson, Ek & Michanek, 2007). From a judicial

perspective, the Swedish Government requires the approval of a municipal council before permitting the local storage of nuclear material. However, the Government may neglect the local veto, if it is considered to be of utmost importance and in line with the national interest (Ch. 17, § 6, in SFS 1998:808).

Since the 1970s, the Swedish Nuclear Fuel Company (henceforth referred to as the SKB) has been responsible for finding safe areas in Sweden for nuclear waste disposal. This project has been overseen by the Swedish Radiation Safety Authority (henceforth referred to as the SSM). Between 1977 and 1985, the SKB made geological examinations in eight different locations all around Sweden, with the ambition of finding safe regions to store both high- and low-level radioactive waste. In order to disrupt the test drillings by the SKB, the residents of one Swedish village went as far as creating what was at that time known as the world's most prolonged antinuclear protest (Åhäll et al., 1988: 43-45; Lake, 1993). Due to complaints from several of the local communities, the geological examinations were cancelled (Swedish Radiation Safety Authority, 2017).

In the year 2000, three new locations were being presented by the SKB as potential keepers of the nuclear waste, and once again, the NIMBY syndrome emerged. One of the municipalities, Tierp, quickly withdrew from the project after a vote in the city council. Subsequently, only two communities remain in consideration. Eleven years later, the SKB applied for permission to construct facilities for final disposal of nuclear waste in the two remaining communities – Oskarshamn and Forsmark. Both chosen locations are already hosts of nuclear power plants. The application to store high-level radioactive waste in Oskarshamn is still being examined (Swedish Radiation Safety Authority, 2016). In December of 2017, the SSM and the Swedish Land and Environment Court announced the SKB's application for a license to construct a facility for final disposal of low- and intermediate-level waste in Forsmark. The case is planned to be tried in a main hearing under the Swedish Environmental Code in the end of 2018. Until then, organizations, concerned regulatory authorities and other parties will be able to comment on the application (Swedish Nuclear Fuel Company, 2017).

To ignore the problem of finding a safe location to store the nuclear waste is certainly unsustainable. Since the SKB's project has faced strong local opposition, it might be worth evaluating alternative procedures. In situations where a locally unwanted infrastructure project affects a small part of the population more than others, some believe it is necessary to design a fair

compensation mechanism (Mueller, 2017; Sakai, 2012; Chiou, Lee & Fung, 2011). Such a mechanism is primarily characterized as monetary compensation, and has been suggested on various occasions, in Sweden as well as internationally (Devlin, 2005; Inhaber, 1997; 199-200). In the study of public opinion, self-interested motives are enhanced when individuals sense that they will be significantly affected by a policy (Chong, Citrin & Conley, 2001). The NIMBY syndrome is often portrayed as behavior driven by self-interest, and therefore, monetary incentives have been proposed as reasonable attempts at changing the local public opinion.

The belief that individuals can be persuaded with economic compensation is advocated by the devotees of the theory of rational choice. It suggests that individuals are rational, and that they are more likely to choose outcomes with higher utility instead of those with lower utility. The theory portrays humans as narrowly self-interested by nature, referred to as “*homo oeconomicus*” (Aldrich, 1993; Brennan & Lomasky 1993:10; Kirchgässner, 2008: 12-13).

The empirical evidence differs on whether economic compensations reduce the local opposition towards facility siting. Local communities have been offered reimbursements on various instances, and it has been shown that while these incentives failed in some communities, in others, these achieved their purpose (Gallagher, Ferreira & Convery, 2008; Jerkins, Maguire & Morgan, 2004; Mank, 1991). Ergo, it is not a question of *whether* economic incentives influence public opinion, but rather *when* and *how* these incentives influence public opinion.

Where the acknowledged theory of rational choice describes individuals as economically self-interested, others find that monetary incentives may backfire. Criticism has been directed at the assumption that individuals will make calculated and rational choices, despite the contextual circumstances which may trigger an emotional response. Research shows that psychological and social aspects may inhibit individuals from responding to economic incentives (Kamenica, 2012; World Bank, 2014). People reject monetary compensation due to numerous reasons. When individuals regard the offered compensation as small, they sometimes get less prone to a certain action, than if they would receive no compensation at all (Heyman & Ariely, 2004; Gneezy & Rustichini, 2000). Monetary incentives have shown to be counterproductive in cases where the public identifies the compensation as a bearer of underlying unwelcomed social meanings (Bowles & Polanía-Reyes, 2012). Such meanings were displayed in Switzerland, where a local community went from having a positive attitude towards the suggestion of building a nuclear waste repository near their homes, to strongly opposing the project after being offered a monetary compensation.

The offered funds were interpreted as a bribe (Frey, Oberholzer-Gee & Eichenberger, 1996). Economic rationality also seems to be playing second fiddle to mitigation of risk and fairness of the facility siting process, in situations where the public perceive an apparent hazard (Lam & Woo, 2009; Wolsink & Devilee, 2009).

The previous attempts at storing nuclear waste in Sweden has faced strong local opposition, and local concerns will likely appear again. A recurrent issue revolves around the distribution of costs and benefits, as local residents argues they are exposed to the main disadvantages. It has therefore been suggested that local communities should be compensated for the nuisance. Monetary compensation has been proposed, but the empirical evidence is conflicting on whether or not the incentives fulfills their purpose. As the research on human reaction to monetary compensation is insufficient, this thesis attempts to contribute to the research field with a qualitative perspective. The aspiration is to understand individual's reasoning on nuclear waste repository, and what emotions are sparked by including a monetary compensation.

3. QUESTIONS AND METHODOLOGICAL DESIGN

The ambition of this thesis is closely connected with the theories and the research presented. A general depiction of the focus of this thesis appears as the title of this thesis. However, the title captures the essence, but not the specifics. A more explicit description would be to describe it as a qualitative study on the human response to being offered a monetary compensation in exchange for the siting of a local nuclear waste repository. The research shows that a consensus on what effect economic compensation has on the NIMBY syndrome has not yet been established. As the empirical evidence is conflicting, this thesis attempts to contribute with a qualitative perspective by using the methodological design of long interviews.

While primarily focusing on human response to monetary incentive, this thesis clutches on to the now more than ever relevant debate of nuclear waste repository in Sweden. The SKB's previous attempts at suggesting locations to place a nuclear waste repository has resulted in several public outcries. Some protests may emerge again, as a decision on the facility siting for both high- and low-level nuclear waste will be made in the near future. In order to understand possible future protests, individuals' trains of thoughts ought to be examined.

3.1. RESEARCH QUESTIONS AND PURPOSE

With the purpose of adding something substantial to the debate on how economic incentives may affect individual's reasoning on the subject matter, it is necessary to initially measure the response without including the incentive. Thus, this thesis attempts to answer the two following research questions:

- 1) *How do individuals reason about locating a facility for final disposal of nuclear waste in their neighborhood?*
- 2) *How do the same individuals reason on the subject matter when offered a monetary compensation?*

In qualitative research, hypotheses are not tested. Instead, this thesis focuses extensively on the two research questions. The most natural ways of contemplating the subject matter will be explored. Different from other studies on the NIMBY syndrome, this study will explore the thoughts of those in favor of the facility siting as well as those opposing. By not limiting the thesis to those opposing, a wider perspective on individual reaction may be discovered. The attempt is not merely to answer whether people are pro or against the facility siting, but rather *how* they arrive at these preferences. Due to the framing of the two research questions, the attempt is to suggest natural ways of reflecting on the issue at hand.

The main purpose is to explore individuals' reaction to the local siting of a nuclear waste repository, and whether they would reason differently if offered a monetary incentive. Therefore, the results will not answer whether people in Sweden are generally positive or negative towards the facility siting or a monetary compensation. Neither will the results be able to rule out the possibility of other existing trains of thoughts. It merely visualizes the nature of arguments which are likely to appear. Crystallizing frequent modes of reasoning relating to the issue of nuclear waste repositories is desired, especially as the SKB's attempts at locating the facility have been blocked in several instances.

3.2. DESIGN

As the intention of this thesis is to grasp a qualitative understanding of the subject matter, long interviews form the most suitable methodological design. The strength of qualitative research lies

in its capacity to study complexities and processes in great detail, and discovering unknown aspects of the subject matter (Marshall & Rossman, 1989: 46). Questions of *how* may be answered with the intention of identifying individuals' realm of thought (Kvale & Brinkmann, 2014: 31). Long interviews frequently make for a great complement to an already existing research field, inasmuch as it adds a focus on the lines of reasoning. Rather than survey polls, which measure how many reason in a particular manner, the chosen design explores an individual's rationale. Using follow-up questions, the interviewer can explore extensive range of thoughts, which is not possible in quantitative studies (Kvale & Brinkmann, 2014: 176-177). Hence, it is possible to capture unanticipated motives which would have gone unnoticed with other methodological designs (Esaiasson, Gilljam, Oscarsson, Towns & Wängnerud, 2017: 260-261).

3.3. INTERVIEW SUBJECTS

Long interviews were conducted with fifteen individuals which may speak for a large population. The literature on methodological design suggests that fifteen interview subjects makes for an appropriate amount (Esaiasson et al., 2017: 268-269). Each interview took approximately half an hour, and was recorded. Most were held in Swedish, but not all. Based on the interviewees' preference, one interview was executed in English. The main part of the quotation presented in the results of this thesis has been translated to the English language. For the results to be representative of a large public, several considerations were made as regards their selection.

First, individuals from a small community in southern Sweden, called Olofström, were chosen. If the main aspiration of this thesis would have been to contribute to the SKB's ongoing project, citizens from Forsmark or Oskarshamn would have been the preferable selection. However, the purpose of this thesis is to explore how individuals in general reason about living near a facility for final disposal of nuclear waste, and whether the same individuals would argue differently when offered a monetary compensation. Therefore, citizens from practically any society makes for a valid choice, except for large cities, as they are never suggested as possible locations for nuclear waste storage.

Despite not being the core purpose of this thesis, the line of reasoning discovered in Olofström may still contribute to the SKB's project. There is little reason to believe that individuals in Olofström would argue on fundamentally different grounds from those in Forsmark or Oskarshamn. Olofström is located in Blekinge, which is the neighboring region of Kalmar, where

Oskarshamn is located. As to this point, the Swedish Government has not yet decided where to place the facility for final disposal of nuclear waste. If Forsmark, Oskarshamn or any other similar society, was to be chosen, the habitants are likely to react in a manner resembling to the reaction of the public of Olofström.

Although there is one main difference between the societies, it need not form a complication. It might be argued that the public of Forsmark and Oskarshamn will be more inclined to accept the facility than other communities, as they already host nuclear power plants. Regardless of the veracity of that assumption, protests are still likely to appear, albeit with a lesser frequency. If the Government chooses to place the facilities in Forsmark and Oskarshamn, they will most likely be faced with similar public reaction as those found in Olofström. As this thesis attempts to identify the realms of thought, rather than the quantity of protests, Olofström suits the purpose just as well as any other community. If one is interested in knowing how the public of Forsmark and Oskarshamn will reason about the SKB's project, then the results of this thesis could function as a guideline.

Second, fifteen individuals were selected based on the principle of maximal variation. The ambition was to neglect as few types of relevant individual attributes as possible. Reaching for a wider variety makes the results more representative of a larger public (Esaiasson et al., 2017: 270). As can be seen in table 1, the interviewees include both men and women in an extensive range of ages. Both gender and age were seen as relevant individual attributes, as the attempt was for the interview subject to reflect a larger public. Although, a choice was made limiting the variation of age among the interviewees. Minors were excluded, since the interviews were based on the premise of a theoretical referendum (which is described further in the interview guide). The support of such a distinction was that those able to vote in a referendum had the most relevant lines of reasoning to be discovered.

Education was another individual attribute of interest, primary as individual's relation to the scientific community form a central theme of the interviews. The assumption was that individuals with a higher level of education might have a different view of the scientific community. Among the interviewees were individuals with various levels of education. In table 1, the interviewees are marked with an either high or low level of education. Those defined as highly educated in this instance have a post-secondary education, while the term low level of education is used for describing those with a secondary education, or an education of lower degree. As the

highly educated citizens of Olofström only constitutes approximately 14% of the community's total habitants (Statistics Sweden, 2016), lowly educated individuals were shown to be more easily accessible. Although the lowly educated citizens exceed the highly educated in quantity, both categories are sufficiently represented in the selections.

The approaching towards potential interview subjects was made with the thought of maximal variation in mind. By knocking doors randomly, searching in the city square and by asking people in e.g. coffee shops to participate in an interview, a great variation among the interview subjects was established. The nonprobability sampling technique known as snowball sampling was operated with as well. Similar to a rolling snowball, continuously growing larger, the interviewees increased in total by suggesting new interview subjects from their own acquaintances (Esaiasson et al., 2017: 190-191). This method suits the purpose well, as long as the interviewees' attributions still varies in the relevant categories.

In the results of this thesis, each of the fifteen interviewees has randomly been named with a letter, from A-O. In the first part of the interviews, everything quoted from the interview with "A" will be referred to as "1A". Subsequently, the same person will be referred to as "2A" in the second part. Such an arrangement is meant to help the reader comprehend which quotes are said by the same person. The line of reasoning of all interview subjects has been taken into account, and every interviewee is quoted in the results at least once.

TABLE 1

Gender	Age	Profession	Level of education	Name
Woman	56	Dementia nurse	High	A
Man	20	Electrician	Low	B
Woman	75	Retired	Low	C
Man	31	Financial manager	High	D
Woman	43	System operator	Low	E
Man	64	Retired	Low	F
Woman	52	Economist	High	G
Man	32	Administrator	Low	H
Woman	62	Local politician and assistant	Low	I
Man	27	Soldier	Low	J
Woman	32	Optician assistant	Low	K
Man	46	Store manager	Low	L
Woman	54	Nurse and self-employed	High	M
Man	20	Marketer	Low	N
Woman	49	Teacher	Low	O

3.4. INTERVIEW GUIDE

Composed of three main themes, the interview guide is designed to answer the two research questions.¹ The two initial themes are fused in the results, as they are both attempts at answering the first research question, which reads “how do individuals reason about locating a facility for final disposal of nuclear waste in their neighborhood?”. To understand if individuals would reason any differently about the local siting of a facility for final disposal of nuclear waste if offered monetary compensation, it is necessary to initially delve into people’s thoughts about the subject matter without including the compensation. The interviewees are therefore not fronted with the thought of being offered a compensation until the last part of the interview. Instead, the interviews begin with some warm-up questions about their political interests and the duration for which the interviewees have lived in the community.

Next, the first out of the three essential themes begin. In the primary theme, the interview subjects are presented with the global discussion of where to place the facilities for final disposal of nuclear waste. The interviewees are being told of the ongoing mission of locating these facilities somewhere in Sweden and that the waste needs to be kept safe for a very long time. If given the opportunity to vote on a proposal on placing the facility in their municipality, the interviewees explain how they would react. Further, they are requested to envision what repercussions such a facility might have on their community, in terms of both advantages and disadvantages.

The second theme aims at exploring perceived health hazards. When hearing the words “facility for final disposal of nuclear waste”, the interview subjects are asked to describe what first comes to mind. Quite thoroughly, they are asked whether they would be worried in the event the said facility is established nearby and what worst-case scenarios they can imagine. The focus then shifts to explore how individuals will reason if scientists would estimate that the facility will be safe and that human health hazards would be insubstantial. People’s perception and their trust in experts are thereby measured. For the closing part of the second theme, the interviewees were tasked with contemplating whether there is a more preferable location for the nuclear waste to be preserved. Questions were asked about why the preferred location serves as a more suitable choice, and if the health hazards may differ in regards of location.

¹ The complete interview guide is placed in the appendix. Note that follow-up questions are not included in the interview guide. Also, the questions of the interview guide were not followed slavishly, but all relevant themes and questions were covered.

Finally, the concept of an economic compensation was added to the equation. The third theme aims at providing an answer to the second research question, which reads “how do the same individuals reason on the subject matter when offered a monetary compensation?”. Irrespective of the interview subjects’ thoughts, be it positive or negative towards the nuclear waste being kept in their community, they were faced with the idea of being compensated. The proposal was that everyone living in the community with the nuclear waste repository would receive 50 000 SEK each, (equivalent of roughly 6000 USD) annually for decades to come. This amount is inspired by the study of Frey et al. (1996), where the local public were offered approximately the same amount. For the interviewee to answer sincerely, the proposition was introduced in a very serious manner. The compensation was presented as a monthly tax deduction, and not as a bag full of money being delivered once a year. References were made to international examples of economic compensation being conducted in other situations where exist similar needs to place unwanted facilities. The interview subjects reacted to the notion of being compensated, the size of the compensation, and what they think of offering compensation to another community. Lastly, they were asked to speculate how they believe others would reason, given the same circumstances.

3.5. VALIDITY

When analyzing attitudes and trains of thoughts from a collected interview material, the purpose is to interpret (Solér, 1997: 104). The risk with qualitative interviews is that the interviewer might make inaccurate interpretations of the thoughts presented by the interviewee. But by frequently questioning and checking the interpretations of the interview subject, the researcher can avoid having a negative impact on the validity of the results (Sandberg, 1994: 62). Verifying the validity of the collected material is not the final task, but something done continuously throughout the research process (Kvale & Brinkmann, 2014: 298-299). These guidelines were followed thoroughly.

Since all interviews were recorded with the consent of the interviewees, accurate quotation is possible in this thesis. The audio recordings were studied with caution and detail when transcribing and translating the material. In some instances, the quotes have been slightly edited for grammatical and legible reasons. Making smaller edits in the quotation is necessary (Kvale &

Brinkmann, 2014: 331), and does not affect the validity of the material.² It is vital to reflect on what effect the phrasing of the interview questions may have on the validity of this thesis (Esaiasson et al., 2017: 61-62). Designed with the purpose of leaving much to the imagination, the interview guide was not supposed to lean the interviewees in a certain direction. Rather than presenting research about nuclear waste repository, the interviewees were asked which thoughts they would associate with the prospect of such a facility. The same logic applied to the framing of the monetary incentive, which was presented as a serious alternative without positive or negative characteristics.

When evaluating the most evident concerns of a study, the term “face validity” is usually operated with (Esaiasson et al., 2017: 62). The interviewees’ possibility of merely envisioning the suggested scenarios is a factor in need of problematizing. The SKB has not suggested Olofström as a potential host for a facility for final disposal of nuclear waste, and neither has the local public been offered a monetary incentive. There is a major difference between reasoning about a theoretical facility siting with an economic compensation, and the actual scenario. The individuals interviewed might have argued differently, if offered a monetary incentive in reality. This problem was difficult to bypass, as it was not possible to offer the interviewees 50 000 SEK each. Neither was it possible for me as an interviewer to stay at Forsmark or Oskarshamn for the time required to carry out fifteen interviews. Yet these limitations do not necessarily affect the validity of the results. The subject matter is emotionally charged, even without concrete proposals. As the interviewees were promised anonymity, there were no clear reasons for them to be dishonest or withhold their true opinions on the subject matter. By accentuating the gravity of the research, and asking the interviewees to answer sincerely, the material can be regarded as valid (Esaiasson et al., 2017: 267).

It is also worth reflecting on whether the interviewer effect may have had an impact on the interviewees. The interviewer can have an influence on the interview subjects by creating an atmosphere where the interviewees feel comfortable sharing their realm of thoughts, or an opposite effect making the interview subjects distressed (Kvale & Brinkmann, 1997: 170). In order to not create a negative interviewer effect, interview scenarios were practiced beforehand. It is critical for the researcher to be aware of what signals the interviewee might be perceiving. By practicing, the risk of making mistakes such as interrupting the interview subjects or appearing to disagree was

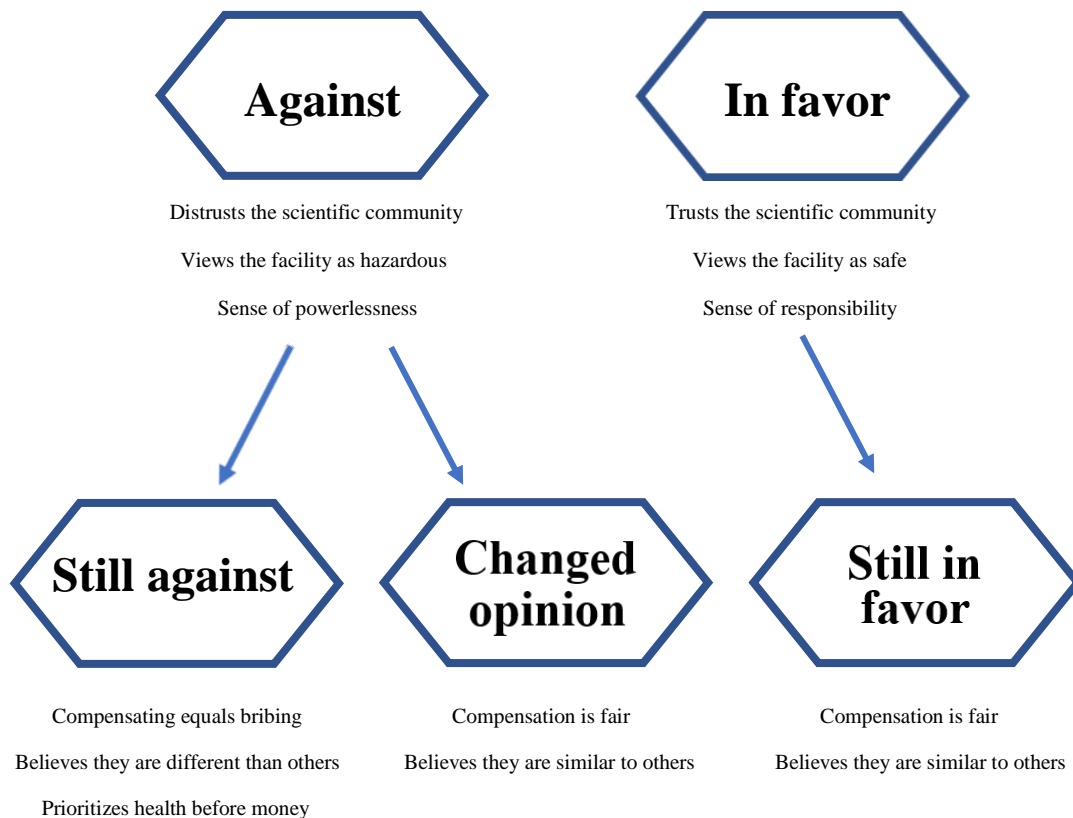
² The audio recordings are available for examination, if there are questions regarding their validity.

decreased. As the literature suggests, the interviewees were provided with encouraging and interested inflection, in an attempt to generate openness and participation (Marshall & Rossman, 1989: 65).

4. RESULTS

The results are divided in two parts, wherein the first attempts to answer the primary research question, which regards individual reaction towards the proposal to allocate a facility for final disposal of nuclear waste in their neighborhood. In figure 1, known as a category schedule, the top two shapes illustrate the two different trains of thought discovered. Below the shapes, general descriptions of the categories are displayed. The three following shapes represents the diverse thoughts triggered by the addition of a monetary incentive, thereby answering the second research question of this thesis.³ The figure also displays the structure of the presented results.

FIGURE 1



³ The observant reader may note that the fourth category, of which the study by Frey et al. (1996) is recognized for, was not identified.

4.1. NUCLEAR WASTE REPOSITORY

In the first major part of the interviews, the ongoing search for a safe location to place the nuclear waste repository in Sweden was introduced. The interviewees were asked how they would react if their community would be suggested as a host of such a facility, and how they would vote in a local referendum on the subject matter. Furthermore, they were asked what they associate with the words “facility for final disposal of nuclear waste”, and whether they could imagine both positive and negative effects of having such a facility in their neighborhood. By focusing on perceived hazards, the interviewees’ trust in the scientific community was examined. Although the level of political interest varied largely, all the interviewees stated that they would vote in a referendum on whether to place the facility in their neighborhood. The results did not find support for BANANA effect, nor the NIABY syndrome. I.e., the individuals did not seem to be protesting the idea of storing the nuclear waste, they merely wished it to be located elsewhere. The answers of the first segment of the interviews can be summarized in the two following categories:

1. Those against placing the facility in their neighborhood
2. Those in favor of placing the facility in their neighborhood

4.1.1. “MANKIND WILL DESTROY ITSELF” – THOSE WHO OPPOSE

The first out of the two very distinctive lines of reasoning are formed by those who oppose having the facility in their neighborhood. The NIMBY syndrome surfaced, as people associated nuclear waste repository with something hazardous. Even if they did not consider themselves to be well informed on the topic of nuclear waste repository, they still declared strong opinions about the subject matter. The fear of being ignored by those in power generated a sense of dejection and powerlessness. If given the opportunity, everyone in this category would vote against the proposal without hesitation. They described their community as too densely populated, and thus not an appropriate location for such a facility. At the same time, people in this category struggled to recognize some part of Sweden as a safer site than their own community. The risk was considered to be just as high, regardless of its location.

Northern Sweden, however, was unanimously considered a more suitable location, for two main reasons. First, fewer people live in that region, which would mean that fewer citizens would be affected if something were to go wrong. Second, northern Sweden was seen as being as far away

from their own municipality as possible. A more precise location was not suggested in this general line of thought. The essence was simply that the facility should be placed somewhere less densely populated. It was also suggested that the radioactive waste should be stored in the same area as the nuclear power plants are located. This line of thought coincides with the SKB's strategy. Locations outside Sweden were suggested too, such as the desert of Sahara.

While emphasizing their negative attitudes towards locating the facility in their community, some indicated that they felt selfish and egoistical. They understood the difficult situation of finding a location for an unwanted facility, and their thoughts are well captured in the following quote: “(some might argue) that we have some kind of responsibility to the nation and that we should fulfill our duty, but I think it's difficult to be that kind-hearted. I would have prioritized the wellbeing of myself, and those around me” (1N).

When asked what first comes to mind when picturing such a facility, the characterizations were exclusively negative. Leakage, radiation and cancer were shown as recurring anxieties, and people expressed fears of their community being exposed to a similar catastrophic nuclear accident as the Ukrainian city of Chernobyl. Such a scenario was associated with polluted nature and wildlife, and a “ghost town” (1A). At the top of the mind, one interviewee described the facility as isolated and surrounded by “signs of poison with skulls, and men in white overalls” (1L). In dread of the water and nature being contaminated, people within this line of thought explicitly stated that they would consider moving elsewhere if the facility were to be located in their municipality. Even if scientists would ensure that the nuclear waste would be safely managed, people would still feel worried. In fact, a tenacious distrust towards the scientific community in general was displayed among the individuals in this category. Two distinctive reasons behind the distrust were shared. The first was that scientists are merely human, that everyone can miscalculate. When planning for a nuclear waste repository, any mistake was considered to be fatal. This fear is displayed in the following paragraph, composed of several quotes from the interviews.

Not all science is properly done. Everyone can be wrong and make mistakes (1O). In the end, it's about real human beings taking care of the waste, and the human factor plays a considerable part. You need to be able to trust that those managing the waste do it impeccably, and it has been shown from time to time that mankind cannot be trusted (1M). I often say that by looking backward, checking our history, we can find some patterns continuing in the future. Some things were once regarded as perfectly safe. But when we look back, we see that it was absolutely ludicrous. I feel

very skeptical (1N). Just because it was considered safe once, doesn't mean it is now. One plus one does not always equal two (1L).

The second reason for distrusting scientists went beyond mistakes, by describing the scientific community as misleading and dishonest. As can be seen below, people expressed fears of being deceived by scientists with alternative motives.

When science becomes too commercial, with a large need to sell, I sometimes wonder what's behind it all (1E). I'm a pretty skeptical person [...] Today it's very expensive to conduct research, and if scientists would get in touch with someone willing to finance their research, then we're talking about a lot of money. It's usually an organization, company or someone with a special interest on the subject matter. They want to find a specific answer, which often affects the result of the scientific study, what's being revealed and what's not (1H). You can do whatever you want with statistics, you can twist and turn it into any advantage you prefer. Unfortunately, man can be bought with money today. Most people are easy to persuade with money. [...] Mankind will destroy itself, we are going to destroy this earth (1M).

Tasked with evaluating possible benefits of having a nuclear waste repository in their community, the potentially increased amount of labor was the most prominent speculation. Jobs regarding both building the facility and maintaining the waste, were seen as positive outcomes. Other than that, the general opinion may be summarized in the following quote: "There may be *some* advantages (of having the facility in this community), but since I'm against, I can't really picture any advantages at all. I can only see fear and catastrophe in front of me... and man should have thought of this before we adopted nuclear power" (1M).

4.1.2. "IT'S ABOUT GIVE AND TAKE" – THOSE IN FAVOR

Not everyone who participated in the interviews showed signs of the NIMBY syndrome. A considerable amount reacted positively towards the proposition, and argued in favor of placing it in their community. As long as they would be assured that the waste would be handled responsibly and kept safe, they felt comfortable having the facility in their neighborhood. Northern Sweden was not immediately recognized as a suitable siting location, as it was for those in the first category. When asked to suggest a region to place the facility, the individuals argued that such a repository should be located deep within a mountain or below ground. It appeared not to be important whether it took place in their own neighborhood, or in any other part of the country.

Reaching an end to the difficult challenge of finding a location for the nuclear waste repository appeared to be the strong motive. The commitment to the nation was a shared view, or as one interviewee put it: “it’s about give and take” (1G). This line of thought may be described as an act of pragmatism, as individuals saw a precarious situation which can go on no further. The quotes below summarizes this category well:

We need to trust the knowledge we have today (1G). We need to place it somewhere, we can’t just leave it be. [...] We have decided to use nuclear power, and then we need to take care of the waste as well. [...] We need to manage the situation, because sooner or later we’ll reach a point where we can’t postpone it any longer. Preferably, this facility can be up and running before we close (the nuclear power plants), because they can’t keep going forever (1F).

Similar to those in the previous category, people in the second category admitted to not being well informed on the subject matter. The difference was that the individuals within this line of thought were not anxious about not knowing much about nuclear waste repository. Rather, they showed great trust in scientists and a confidence that the professionals are capable of storing the waste without making any irreversible mistakes. The attitudes toward the scientific community constitutes a great distinction between the categories. Unlike those in the first category, people with this line of reasoning expressed faith in scientists, in their fellow human beings and in Sweden as a nation. The Swedish construction standards were described as high, and therefore, people regarded the chances of being affected by leakage and radiation lower.

Furthermore, individuals with this line of thought argued that they could picture several benefits of having the facility in their community. Rather than merely putting an end to the struggle of finding a location for the facility, such a construction project would also gain their society. The plausible increase in labor was viewed as beneficial, just as it was by those who would vote against the proposal in a referendum. Additionally, the waste itself was estimated to have a later purpose. It was argued that the waste possibly could be used in the future, as “we are not stuck with the technology we have at the moment” (1J).

Imagining potential disadvantages of hosting the facility in their neighborhood appeared to be rather difficult for the individuals in this category. As safety reasons did not alarm the individuals with this line of reasoning, they struggled to imagine what negative impacts such a facility might have on their neighborhood. Even when asked to picture some worst-case scenarios, people still did not appear to be worried at a level necessary to vote against the proposal in a local

referendum. Just as with the people in the previous category, the Chernobyl disaster was mentioned, as well as thoughts of leakage and radiation affecting the nature in some degrading manner. Contrary to those in the first category, such negative consequences were regarded as unlikely, at least in the near future. One interviewee argued that he was not frightened, mostly because potential negative impacts might not occur until long after he had passed away. “If something were to happen, I think it would take a very long time before it was recognized. I might even be dead by then” (1B).

4.2. MONETARY COMPENSATION

In the second part of the interviews, the feature of a monetary compensation was introduced. The attempt was to find an answer to the second research question of this thesis, which reads “how do the same individuals reason on the subject matter when offered a monetary compensation”. The interviewees were asked to how they would reason if they were being offered an economic compensation in the size of 50 000 SEK annually, for the storing of nuclear waste in their municipality. During this part of the interviews, the questions revolved around the interviewees view of a compensation, whether they would accept it and how they feel about offering a compensation to another community. They were also asked to speculate on how they think that others would reason. By introducing an idea of economic compensation, the interview subjects could be divided into three new lines of reasoning, which are listed below.

- 1) Those who continued to refuse to place the facility in their neighborhood
- 2) Those who changed their minds, from negative towards positive
- 3) Those who continued to be in favor of having the facility in their neighborhood

4.2.1. “YOU CAN’T BUY A CURE FOR CANCER” – THOSE WHO STILL OPPOSE

The first line of reasoning belongs to those who argue that they would not be affected by the thought of a monetary reimbursement. Everyone in this category originally opposed the construction project and represented the NIMBY syndrome. Compensation or none, they still felt a deep concern and an anxiety that something dangerous might happen in a location with such a facility. With future generations in mind, the individuals in this category felt unable to accept the compensation. A prevailing theme was that “money comes and goes” (2D), while “you can’t buy a cure for cancer”

(2O). The general line of thought was that money only plays a minor part, when compared to perceived health hazards. It was argued that even if money “certainly would have a great impact on my life, it wouldn’t surmount my skepticism. [...] It’s more important for me to live till the age of ninety, than have a compensation of 50 000 a year and only turn sixty “(2N).

The compensation was not merely viewed as a too weak incentive, but it was also associated with other negatives. The monetary reimbursement generated a bribe-effect, as people got the sense that they were being bought. “I don’t like it, it’s not right” (2C), one interviewee argued firmly. Offering an economic incentive was regarded as a possible attempt at silencing their critical voices. However, when asked how they would feel if another community (in e.g. northern Sweden) would be offered a similar arrangement, there were no disputes. They were in fact positive towards the idea of providing another municipality with a monetary compensation.

The size of the compensation was viewed as reasonable, even if they themselves was not interested in accepting it. It was argued that even with a larger amount, their response would have been the same. Individuals with this line of thought suggested that if the amount would have been higher, their suspicions would have been as well. “It would have felt like the scientific community had ‘ganged up on us farmers’, in an attempt to ‘scam’ us” (2N), expressed one interviewee. They expressed that they would have voted no in the referendum, even if the compensation would have been as large as one million SEK. The problem was with the facility, not with the compensation nor the size of it.

When speculating on how others would reason, if offered the same proposition, the individuals in this category gave very determined answers. Fundamental in this line of thought was that the individuals in this category believed that they would reason differently than others. Two main differences were presented. First, the distrust towards the scientific community was once again uttered, as the interviewees doubted the validity of the research. Fears of being deceived made them unwilling to accept the proposition. Stressing the importance of framing, the interviewees in this category argued that others probably would vote in favor of the facility siting, if the referendum would be shaped in a straightforward approach. If demands of transparency were met, it was argued that most individuals would be inclined to accept the proposition. It was implied that others would have lower demands of transparency, that they would be less skeptic and more inclined to trust the scientific community.

Second, the individuals in this category were certain that most people can be persuaded

with monetary incentives. Others were believed to be inclined to vote in favor of constructing a nuclear waste repository in their community, if offered a compensation. They themselves stood out from the rest, according to themselves. A strong moral compass was emphasized upon as the fundamental reason behind their unwillingness to be influenced by compensations. Indications were made about others' alleged low moral standards, and precarious economic situations. The following paragraph captures the general line of reasoning on this subject:

Today, money is everything. Everyone has a price. How much money could I get if I were to sell my soul? I think this is like selling one's soul, because we know that this will be dangerous for 100 000 years. We don't care, since we're not going to live that long (2M). Anyone would drool, and many would have taken the deal. Money is something that everyone needs and lives for. But my way of reasoning is quite the opposite (2K).

4.2.2. "THIS COULD BE A GREAT INDUSTRY" – THOSE WHO CHANGED OPINION

Among those likely to vote against the construction project, some changed their minds when offered an economic compensation. After some time of reasoning, several appeared to be persuaded by the idea of a reimbursement. Initially, hosting a nuclear waste repository was believed to only cost their society a great many negative consequences. But as the interviews went on, the attitudes towards the project started transfiguring. From cost to benefit, the associations with the facility shifted – and so did their opinion on the subject matter. Individuals with this line of reasoning ultimately viewed the facility as a generator of profits, on an individual level as well as for the society. The size of the compensation was viewed as reasonable. Although, they believed that they would have voted in favor of the proposition, even if the sum would have been greater. Unlike the reactions presented in the previous category, health hazards appeared to no longer be as big of an issue. Nor were people affected negatively by a monetary incentive. The only apparent common ground was that both categories believed that others would vote yes in the referendum.

It was suggested that other nations should be allowed to store their nuclear waste in the Swedish facility, at a monetary expenditure. "This could be a great industry" (2L), one interviewee speculated. Contrary to those in the previous category, people with this line of thought argued that the market principle is to be considered as a societal good. "Everything can be bought with money" (2L), argued the people of this category in a joyous manner. Furthermore, they argued in favor of

a compensation, not just because they wanted to enjoy the reciprocity, but also so that they could support others. With a compensation, they felt that they would be able to provide economically for their families and future grandchildren. Supposedly, they would not have accepted the financial reimbursement “for my advantage, but rather to benefit someone else. And not for any other reason” (2I). That way, people suggested they would accept the compensation for altruistic reasons and not on selfish grounds.

4.2.3. “WELL, WHY NOT? – THOSE WHO STILL FAVOR

Those who initially supported the idea of storing nuclear waste in their neighborhood, and who kept that view after being offered an economic compensation, compose the final line of reasoning. After having argued about the responsibility to act in solidarity, they felt that a monetary reimbursement served a fair purpose. They saw no rational reason to refuse a monetary compensation for something they had agreed to even without the incentive. Simply put, “well, why not?” (2B) was the recurring line of reasoning when offered a compensation. One interviewee argued that “it sounds very reasonable. The tax pressure is too high as it is, and I think all forms of tax deductions are favorable” (2J).

While stressing that they would have voted in favor of the proposition with or without a compensation, they had no interest in declining such an offer. As long as the motion would be presented in a serious and justifiable action, the people in this category felt rather carefree. They approved the size of the compensation, and added that a too large compensation might have a negative effect on the local level of employment. People argued that “the larger the amount, the more people would be persuaded” (2F), and a society with financially independent citizens was not desired, as a society needs working individuals to function properly.

Similar to the two previous categories, they believed that most would vote in favor of the nuclear waste repository if granted a compensation. The individuals in this category viewed it to be plausible, since they themselves would have accepted the offer. Compensating local communities financially was seen as an effective way to find locations to place unwanted facilities.

5. ANALYSIS

One of the benefits of the methodological approach of long interviews is that it offers the possibility of thoroughly examining an individual's line of reasoning. The existing research on the NIMBY syndrome suggests that skeptical individuals will not be reassured by the guarantees of scientific experts (see e.g. Gallagher, Ferreira & Convery, 2008). This thesis has found that expert statements do not only fail to persuade individuals, but may even evoke a negative response. Those expressing the NIMBY syndrome demonstrated a significant distrust in scientific experts. The fairly non-provocative question: "would you say that you trust the scientific community in general?", gave a striking response. By dividing the society in two distinctive groups, the interview subjects with this recurrent train of thought described scientific experts as dishonest and manipulative, while others was portrayed as ordinary. In various ways, this dividing structure can be described as populist. It juxtaposes "the people" against a corrupt elite financially sponsored by disingenuous actors. When arguing on how expensive it is to conduct research and how scientists can be bought with money, the interviewees never suggested what motives these financial actors might have for their actions. It was as if these actors might gain on locating the facility in a certain municipality, for unknown reasons. This line of reasoning indicates something about individuals perceived distance from the government and "the establishment". A low trust in others were displayed, as well as a feeling of being let down.

Including a monetary incentive in the discussion only stimulated those arguments, as individuals with the aforementioned train of thought felt bribed rather than compensated. The size of the compensation did not appear to affect their reasoning, which has occurred in previous research (e.g. Gneezy & Rustichini, 2000). Rather, several interview subjects refused the compensation, arguing that they could not be bought with money. Some interview subjects even argued that they would decline an annual compensation of one million SEK, which raises some questions. There is of course the possibility that a nuclear waste repository could spark such strong feelings of anxiety, that individuals may reject immense sums of compensation. It might also suggest that the individuals with this line of thought had a degrading view on others, and or a great desire to call attention to one's own moral character. Furthermore, perhaps it merely indicates that the individuals were incapable of taking the theoretical scenarios seriously.

The need of fair compensation mechanisms has been requested in the NIMBY literature

(e.g. Mueller, 2017). If this thesis may present any substantial reflections on the subject matter, it is this: a compensation mechanism can only be regarded as fair if the affected individuals consider it to be true. Ergo, a “fair” mechanism should in this instance be defined as “locally accepted”, if the SKB’s project is to be realized. Several individuals were unwilling to accept the compensation, while favoring the idea of offering another community the same compensation. In other words, they regarded the compensation as fair – but unwanted. If the siting difficulty is to be settled, perhaps the literature suggesting “fair” mechanisms offers little practical contribution. Rather, the voice of the local public must be heard if a development in the dilemma of nuclear waste repository is requested. If not, the attempted facility siting will face loud vocal protests, just as it has before.

Offering another Swedish community monetary compensation will likely generate similar lines of thought as those characterized in this thesis. While some will refuse the compensation, others will regard it as reasonable. This thesis indicates that some will be persuaded by the incentive, from opposing the project into arguing in favor. Advocates of the economic theory of rational choice would argue that the changed opinion is in line with their description of human behavior, as narrowly self-interested.

In a notable study, Frey et al. (1996) illustrated how the bribe effect may cause large scales of individuals to shift opinion on local storing of nuclear waste, when offered a monetary compensation. Such an effect was not displayed amidst the interviewees of this thesis, as no one changed their mind from initially being in favor of the project. Although, that does not mean that individuals in Sweden would not reason in such a particular manner if offered a compensation. As this thesis merely attempt at suggesting which lines of reasoning are likely to appear, the pursuit is not to exclude any other potential train of thought. What this thesis can suggest on the topic of monetary compensation in regard to local nuclear waste repository, is that it triggers very different forms of reaction. Some individuals are persuaded, and some are not. Such a conclusion is rather undisputed, and not remarkably groundbreaking.

However, when examining how the interviewees viewed each other’s temptation to accept the compensation, this study does make for an interesting observation. All lines of reasoning displayed in this thesis included the impression that others would accept the compensation. The most intriguing instance might be that those who claimed they would refuse the compensation were very eager to explain that they were different from the rest. It was argued that they were fundamentally different from others. This line of reasoning is not unlike the hypothesis known as

the third-person effect. It suggests that individuals believe that mass media has persuasive effect on others, but not themselves (Davison, 1983). To some degree, these individuals considered themselves to be one of a kind, immune to monetary incentives. This is an interesting aspect of the NIMBY syndrome, and one which would have gone unnoticed with other methodological approaches. With long interviews, this thesis has identified an unanticipated form of behavior triggered by the proposal of monetary compensation, making for a substantial addition to the research field.

As a final analyzing remark, it is worth reflecting on the question: “for whom?”. All lines of reasoning were based on different justifications. When motivating their point of view, the interviewees generally suggested that their opinion would benefit a larger group, instead of describing what effect the compensation would have on their own life. The different groups may be categorized on an either societal-, national- or international level. Those who changed their minds believed that the facility would make their community grow stronger. It was suggested that the society would gain from being compensated. From a national point of view, those who were inclined to vote in favor of the proposition, with or without compensation, instead felt it was a public duty to accept the facility. By agreeing to store the nuclear waste in their community, the nation would see an end to the struggling dilemma. Those expressing the NIMBY syndrome accentuated what catastrophic consequences the nuclear waste might have if stored unstable. If something were to go wrong, mankind and the planet was believed to be in danger. Thus, by distrusting scientists it was indirectly argued that the international community would be kept safer. None of the interviewees described their decision as based on self-interest, contrary to how the NIMBY literature usually describe the public opposition (e.g. Lake, 1993). The fact that individuals wished to either accept or refuse the monetary compensation by referring to a larger group is worth noting, considering that such a compensation would primarily affect the individual.

6. CONCLUSION

The two research questions of this thesis are “how do individuals reason about locating a facility for final disposal of local nuclear waste in their neighborhood”, and “how do the same individuals reason on the subject matter when offered a monetary compensation”. By studying human behavior through the method of long interviews, this thesis has pinpointed five trains of thought, which

provides detailed answers to the research questions. The primary two lines of reasoning suggest likely reactions to local nuclear waste storage, whereas the following three outline the same individuals' reactions to being offered a monetary compensation. Presenting the final three lines of reasoning in this conclusion is adequate, as they also contain the two initial trains of thought.

The first is characterized as the NIMBY syndrome, defined by individuals who oppose the idea of locating the facility in their neighborhood. These individuals argue that they would oppose the project even if offered a sizable monetary compensation. Perhaps the most interesting discovery in this line of reasoning was the strong distrust towards the scientific community. While previous research suggests that expert reassurance is not sufficient to calm sceptics, this thesis goes even further. Just the thought of scientists sparked an emotional response in these individuals, describing the scientific community as both corrupt as well as bound to make mistakes. This line of reasoning adds a substantial contribution to the NIMBY literature. When introducing a monetary incentive, this thesis found yet another previously unexplored aspect of the NIMBY syndrome. The interviewees in this category were certain that they argued on fundamentally different grounds than other individuals. Others were believed to be inclined to accept the monetary compensation, while they themselves were of a stronger and resilient character.

The second line of reasoning belongs to those who initially opposed the local facility siting, but changed their opinion when offered a monetary compensation. Similar to the previous category, these individuals criticized the scientific community. Despite the critique, they considered the reimbursement as fair and began hypothesizing on how the facility may benefit their society. In support of their changed opinion, the possibility of providing their family and relatives with financial support was emphasized upon.

Individuals in favor of locating the facility in their neighborhood formed the third and final train of thought. Generally, these individuals are not studied in the NIMBY literature, as they do not display a vocal opposition towards facility siting. But in this thesis, they have a comparative purpose to serve. Unlike those in the first category, these individuals neither expressed a distrust in the scientific community, nor did they worry about potential health hazards. Instead they argued that they would have welcomed the facility, with or without a monetary compensation.

Individuals' perception of the scientific community has in this thesis been identified as a prominent contrast between those who oppose and those in favor of locating a facility for final disposal of nuclear waste in their neighborhood. This finding may serve as a basis for further

studies. If the struggle of allocating nuclear waste repositories in Sweden is to be settled, perhaps the SKB needs to adopt an approach which is in sync with the mindset of people as reflected in this thesis.

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APPENDIX

INTERVIEW GUIDE

We will begin by talking about you and your views on the society you live in. Later on, we will focus on a discussion regarding a potential construction project here in Olofström, and what your thoughts are on the matter. When I have asked you all my questions, you will be able to air some additional thoughts, if you have not already said all that you want to say. I want to emphasize that there are no wrong answers, and it is important that you feel that you can speak as freely as possible.

INTRODUCTION

1. Please start off by telling me a little bit about yourself, e.g. age and profession.
2. How long have you lived in this community?
3. Would you say that you are interested in politics?
 - a. Do you usually vote in elections? Why?
4. How would you describe your relations to other citizens in this community?
 - a. Do you know a lot of residents in this community?

THE FIRST THEME: INTRODUCING THE TOPIC

For a long time, there has been a global challenge regarding where to place the facilities for final disposal of nuclear waste. Somewhere in Sweden, the nuclear waste needs to be preserved for approximately 100 000 years. The main difficulties have been finding safe locations with citizens that would approve such a facility being constructed in their community. Different whereabouts has been discussed, but no such facility has yet to been established. If this community would be suggested as a possible location for nuclear waste repository, the local public would be permitted to have a say in the process. A local referendum or a similar arrangement might be designed to fully consider the local publics thoughts on the matter.

5. How would you react, if Olofström would be suggested as a possible host for a facility for final disposal of nuclear waste?
6. What is the first thing that comes to mind when I say the words “a facility for final disposal of nuclear waste”?

7. If you for a moment were to set aside your own reaction towards the suggested construction project, could you imagine both positive and negative implications such a facility siting could have on this community?

THE SECOND THEME: VIEWS ON POTENTIAL HEALTH HAZARDS

8. How would you view the security and potential health hazards regarding said facility?
9. Would you feel worried if the facility were to be located in this community?
10. What do you think is the worst thing that could happen if the facility were to be located in this community?
11. If scientists would estimate that the facility would be safe and that the health hazards would be insubstantial, how would that affect your reasoning?
 - a. Would you say that you trust the scientific community in general?
12. Could you imagine any other place in Sweden more suitable for storing nuclear waste?
13. Do you think that the potential health hazards may vary in regards of where in Sweden the facility would be located?
 - a. (If the interviewee's answer is yes) Why do you think that?
 - b. (If the interviewee's answer is no) Why would the location you suggested in the previous question be a more suitable choice?

THE THIRD THEME: MONETARY COMPENSATION

There is an additional aspect of this political debate which I would like for you to consider. It is a question about compensation. From an international perspective, it is not unusual to offer some sort of compensation to the public living close to a, by some regarded as, unwanted facility. Such a procedure might be in the form of a tax deduction. For a moment, let's say that this community would be suggested as an actual location to place the facility for final disposal of nuclear waste. Let's also say that everyone in this neighborhood would be offered a monetary compensation equivalent of 50 000 SEK a year, for decades to come. Just as discussed earlier, a local referendum might be suggested in order to interpret the voice of the local public.

14. Under the condition that everyone in this community would receive such a compensation if the turnout of the referendum would be in favor of placing the facility in this community, how would you reason?

15. Why do you think it is that you did/did not change your opinion when a monetary compensation was suggested?
16. Would you argue differently if the sum was greater?
 - a. Would you accept an annual compensation equivalent to one million SEK?
17. What do you think about offering such a compensation to the community you previously suggested as a more suitable location for nuclear waste repository?
18. How do you think others would reason, if given the same circumstances I just presented to you?

CLOSING QUESTION

19. Do you have any last remarks that you have not already had the time to share?